

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:
electing a first server as active manager server, wherein the first server resides in
a chassis and the active manager to run services for each server in the
chassis;
electing a second server to replace the first server to act as the active manager
server based on a predetermined criteria if the first server fails, wherein
the second server resides in the chassis;
~~determining automatically, by receiving an indication, if that~~ the first server has
~~failed or has been overloaded,~~ wherein the indication is ~~generated~~ based
on health matrices and performance matrices;
automatically replacing the first server with the~~electing a second server~~
~~automatically as the active manager server to replace the first server as the~~
~~active manager server~~ in response to the indication received, ~~wherein the~~
~~second server resides in the chassis;~~ and
redirecting requests for the first server to the second server.
2. (Currently Amended) The method of claim 1, ~~wherein the election is performed~~
~~based on a predetermined criteria,~~ wherein the predetermined criteria comprises
electing a server with the lowest IP address as the active manager server.
3. (Previously Presented) The method of claim 1, further comprising:
extracting the health metrics and performance metrics, wherein the health metrics
and performance metrics are dynamic;
replicating the health metrics and performance metrics, wherein the replicating
the health metrics and performance metrics is performed periodically; and

dynamically updating a database populated with the health metrics and performance metrics.

4. (Original) The method of claim 3, wherein the health metrics are server-based.
5. (Original) The method of claim 3, wherein the health metrics comprise tracking power levels and temperature levels based on predetermined thresholds.
6. (Original) The method of claim 3, wherein the performance metrics comprise operating system-based metrics, kernel-based metrics, and server-based metrics.
7. (Previously Presented) The method of claim 3, wherein the performance metrics comprise tracking CPU utilization and memory utilization based on predetermined thresholds.
8. (Original) The method of claim 3, further comprises an alert mechanism to alert whenever the health metrics or the performance metrics violate the predetermined thresholds.
9. (Original) The method of claim 3, further comprising replicating identification information, wherein the identification information is static.
10. (Currently Amended) A high-availability management system comprising:
a chassis comprising a plurality of slots;
a plurality of server modules coupled to the plurality of slots, wherein a first server module of the plurality of server modules is elected as an active manager server, the active manager to run services for each of the plurality of server modules;
a second server module elected to replace the first server to act as the active manager server based on a predetermined criteria if the first server module fails;

an indication ~~to automatically determine if~~ to indicate that the first server module has failed ~~or has been overloaded~~, wherein the indication is generated based on health matrices and performance matrices;
a the second server module to automatically replace the first server module as the active manager server in response to the indication received; and
a redirection process to redirect requests for the first server module to the second server module.

11. (Original) The high-availability management system of claim 10, further comprising a database coupled to the chassis for storing information regarding chassis identification, slot identification, and server module type.
- 12-13. (Cancelled)
14. (Previously Presented) The high-availability management system of claim 10, wherein the election of the first server module as the active manager server is performed by middleware, wherein the middleware comprises a software.
15. (Currently Amended) The high-availability management system of claim ~~13~~10, wherein the election of the second server module as the active manager server is performed by the middleware.
16. (Original) The high-availability management system of claim 10, wherein the first server module is elected from a group comprising servers, telephone line cards, and power substations.
17. (Currently Amended) A method of uninterrupted management using sticky identification comprising:
assigning a chassis identification to a chassis coupled to a computer, wherein the chassis comprises a slot;

assigning a slot identification to the slot based on ~~the slot's~~ a location of the slot
in the chassis;

assigning a server module type to the slot based on the chassis identification and
the slot identification, wherein the server module type indicates server
module characteristics;

electing a first server module as active manager server, wherein the first server
module resides in the chassis and the active manager to run services for
each server in the chassis;

electing a second server module to replace the first server module to act as the
active manager server based on a predetermined criteria if the first server
module fails, wherein the second server module resides in the chassis;

~~determining automatically, by receiving an indication, if that~~ the first server
module has failed ~~or has been overloaded~~, wherein the indication is
~~generated~~ based on health matrices and performance matrices;

automatically replacing the first server module with the ~~electing a second server~~
module ~~automatically~~ as the active manager server ~~to replace the first~~
~~server module as the active manager server~~ in response to the indication
received, ~~wherein the second server module resides in the chassis~~; and

redirecting requests for the first server module to the second server module.

18. (Original) The method of uninterrupted management using sticky identification of claim 17, further comprising retaining the server module characteristics corresponding to the server module type.
19. (Currently Amended) The method of uninterrupted management using sticky identification of claim 17, further comprising:

removing ~~a~~the first server module from the slot;
coupling ~~a~~the second server module to the slot; and
managing the second server module based on the server module characteristics
corresponding to the server module type, wherein the managing the
second server module is performed without updating a network
management system.

20. (Original) The method of uninterrupted management using sticky identification of claim 17, further comprising:

assigning a user-defined chassis identification;
assigning a user-defined slot identification;
assigning a user-defined module identification; and
retaining the user-defined chassis identification and the user-defined slot
identification and the user-defined module identification.

21. (Currently Amended) A machine-readable medium having stored thereon data representing sets of instructions, the sets of instructions which, when executed by a machine, cause the machine to:

elect a first server as active manager server, wherein the first server resides in a
chassis and the active manager to run services for each server in the
chassis;

elect a second server to replace the first server to act as the active manager server
based on a predetermined criteria if the first server fails, wherein the
second server resides in the chassis;

~~determine automatically, by receiving~~ receive an indication, ~~if that~~ the first server failed ~~or is overloaded~~, wherein the indication is ~~generated~~ based on health matrices and performance matrices;

automatically replace the first server with the ~~elect~~ a second server ~~automatically~~ as the active manager server ~~to replace the first server as the active manager server~~ in response to the indication received, ~~wherein the second server resides in the chassis~~; and

redirect requests for the first server to the second server.

22. (Currently Amended) The machine-readable of claim 21, ~~wherein the election is performed based on a predetermined criteria~~, wherein the predetermined criteria comprises electing a server with the lowest IP address as the active manager server.

23. (Previously Presented) A machine-readable medium of claim 21, wherein the sets of instructions which, when executed by the machine, further cause the machine to:

extract the health metrics and performance metrics, wherein the health metrics and performance metrics are dynamic;

replicate the health metrics and performance metrics, wherein the replicating the health metrics and performance metrics is performed periodically; and

dynamically update a database populated with the health metrics and performance metrics.

24. (Currently Amended) A machine-readable medium having stored thereon data representing sets of instructions, the sets of instructions which, when executed by a machine, cause the machine to:

assign a chassis identification to a chassis coupled to a computer, wherein the
 chassis comprises a slot;
 assign a slot identification to the slot based on a the slot's location of the slot in
 the chassis;
 assign a server module type to the slot based on the chassis identification and the
 slot identification, wherein the server module type indicates server module
 characteristics;
 elect a first server module as active manager server, wherein the first server
 module resides in the chassis and the active manager to run services for
 each server in the chassis;
elect a second server module to replace the first server module to act as the active
manager server based on a predetermined criteria if the first server module
fails, wherein the second server module resides in the chassis;
~~determine automatically, by receiving~~ receive an indication, ~~if that~~ the first server
 module has failed ~~or has been overloaded~~, wherein the indication is
 ~~generated~~ based on health matrices and performance matrices;
automatically replace the first server module with the ~~elect a second server~~
 module ~~automatically as the active manager server to replace the first~~
 ~~server module as the active manager server~~ in response to the indication
 received, ~~wherein the second server module resides in the chassis;~~ and
 redirect requests for the first server to the second server.

25. (Previously Presented) The machine-readable medium of claim 24, wherein the
 sets of instructions which, when executed by the machine, further cause the

machine to retain the server module characteristics corresponding to the server module type.

26. (Currently Amended) The machine-readable medium of claim 24, wherein the sets of instructions which, when executed by the machine, further cause the machine to:

remove ~~a~~the first server module from the slot;

couple ~~a~~the second server module to the slot; and

manage the second server module based on the server module characteristics corresponding to the server module type, wherein the managing the second server module is performed without updating a network management system.